



P C T

## 国際調査報告

(法 8 条、法施行規則第40、41条)  
〔P C T 1 8 条、P C T 規則43、44〕

出願人又は代理人 F 0 0 4 6 9 の書類記号 2 W 0 0 0	今後の手続きについては、国際調査報告の送付通知様式(P C T / I S A / 2 2 0 ) 及び下記 5 を参照すること。	
国際出願番号 P C T / J P 9 9 / 0 7 3 8 2	国際出願日 (日.月.年) 2 7 . 1 2 . 9 9	優先日 (日.月.年) 2 8 . 1 2 . 9 8
出願人 (氏名又は名称) 、セイコーエプソン株式会社		

国際調査機関が作成したこの国際調査報告を法施行規則第41条 ( P C T 1 8 条 ) の規定に従い出願人に送付する。  
この写しは国際事務局にも送付される。

この国際調査報告は、全部で 2 ページである。

☐ この調査報告に引用された先行技術文献の写しも添付されている。

## 1. 国際調査報告の基礎

a. 言語は、下記に示す場合を除くほか、この国際出願がされたものに基づき国際調査を行った。

☐ この国際調査機関に提出された国際出願の翻訳文に基づき国際調査を行った。

b. この国際出願は、ヌクレオチド又はアミノ酸配列を含んでおり、次の配列表に基づき国際調査を行った。

☐ この国際出願に含まれる書面による配列表

☐ この国際出願と共に提出されたフレキシブルディスクによる配列表

☐ 出願後に、この国際調査機関に提出された書面による配列表

☐ 出願後に、この国際調査機関に提出されたフレキシブルディスクによる配列表

☐ 出願後に提出した書面による配列表が出願時における国際出願の開示の範囲を超える事項を含まない旨の陳述書の提出があった。

☐ 書面による配列表に記載した配列とフレキシブルディスクによる配列表に記録した配列が同一である旨の陳述書の提出があった。

2. ☐ 請求の範囲の一部の調査ができない (第 I 欄参照)。

3. ☐ 発明の単一性が欠如している (第 II 欄参照)。

4. 発明の名称は ☒ 出願人が提出したものを承認する。

☐ 次に示すように国際調査機関が作成した。

5. 要約は ☒ 出願人が提出したものを承認する。

☐ 第 III 欄に示されているように、法施行規則第47条 ( P C T 規則38.2(b) ) の規定により国際調査機関が作成した。出願人は、この国際調査報告の発送の日から 1 カ月以内にこの国際調査機関に意見を提出することができる。

6. 要約書とともに公表される図は、

第 2 図とする。 ☒ 出願人が示したとおりである。

☐ なし

☐ 出願人は図を示さなかった。

☐ 本図は発明の特徴を一層よく表している。

## A. 発明の属する分野の分類 (国際特許分類 (IPC))

Int. C1' G02F1/1368

## B. 調査を行った分野

調査を行った最小限資料 (国際特許分類 (IPC))

Int. C1' G02F1/136

最小限資料以外の資料で調査を行った分野に含まれるもの

日本国実用新案公報 1922-1996年  
日本国公開実用新案公報 1971-2000年

国際調査で使用した電子データベース (データベースの名称、調査に使用した用語)

## C. 関連すると認められる文献

引用文献の カテゴリー*	引用文献名 及び一部の箇所が関連するときは、その関連する箇所の表示	関連する 請求の範囲の番号
A	J P、5-257164、A (シャープ株式会社) 8. 10月. 1993 (08. 10. 93) (ファミリーなし)	1-30
A	US、5784132、A (ソニー株式会社) 21. 7月. 1998 (21. 07. 98) & J P、8-122768、A&EP、708355、A2	1-30

☐ C欄の続きにも文献が列挙されている。☐ パテントファミリーに関する別紙を参照。

## \* 引用文献のカテゴリー

- 「A」 特に関連のある文献ではなく、一般的技術水準を示すもの  
「E」 国際出願日前の出願または特許であるが、国際出願日以後に公表されたもの  
「L」 優先権主張に疑義を提起する文献又は他の文献の発行日若しくは他の特別な理由を確立するために引用する文献 (理由を付す)  
「O」 口頭による開示、使用、展示等に言及する文献  
「P」 国際出願日前で、かつ優先権の主張の基礎となる出願

の日の後に公表された文献

- 「T」 国際出願日又は優先日後に公表された文献であって出願と矛盾するものではなく、発明の原理又は理論の理解のために引用するもの  
「X」 特に関連のある文献であって、当該文献のみで発明の新規性又は進歩性がないと考えられるもの  
「Y」 特に関連のある文献であって、当該文献と他の1以上の文献との、当業者にとって自明である組合せによって進歩性がないと考えられるもの  
「&」 同一パテントファミリー文献

国際調査を完了した日

07. 03. 00

国際調査報告の発送日

21.03.00

国際調査機関の名称及びあて先

日本国特許庁 (ISA/J P)

郵便番号100-8915

東京都千代田区霞が関三丁目4番3号

特許庁審査官 (権限のある職員)

藤岡 善行

2 X

9225

電話番号 03-3581-1101 内線 3295

**PCT REQUEST**

<b>0</b>	<b>For receiving Office use only</b>	
<b>0-1</b>	International Application No.	
<b>0-2</b>	International Filing Date	
<b>0-3</b>	Name of receiving Office and "PCT International Application"	
<b>0-4</b> <b>0-4-1</b>	<b>Form - PCT/RO/101 PCT Request</b> Prepared using	<b>PCT-EASY Version 2.90</b> <b>(updated 10.05.2000)</b>
<b>0-5</b>	<b>Petition</b> The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty	
<b>0-6</b>	<b>Receiving Office (specified by the applicant)</b>	<b>Japanese Patent Office (RO/JP)</b>
<b>0-7</b>	<b>Applicant's or agent's file reference</b>	<b>F004692WO00</b>
<b>I</b>	<b>Title of invention</b>	<b>ELECTRO-OPTICAL DEVICE, METHOD FOR FABRICATING THE SAME, AND ELECTRONIC APPARATUS</b>
<b>II</b>	<b>Applicant</b>	
<b>II-1</b>	This person is:	<b>applicant only</b>
<b>II-2</b>	Applicant for	<b>all designated States except US</b>
<b>II-4</b>	Name	<b>SEIKO EPSON CORPORATION</b>
<b>II-5</b>	Address:	<b>4-1, Nishi-Shinjuku 2-Chome Shinjuku-Ku, Tokyo 163-0811 Japan</b>
<b>II-6</b>	State of nationality	<b>JP</b>
<b>II-7</b>	State of residence	<b>JP</b>
<b>III-1</b>	<b>Applicant and/or inventor</b>	
<b>III-1-1</b>	This person is:	<b>applicant and inventor</b>
<b>III-1-2</b>	Applicant for	<b>US only</b>
<b>III-1-4</b>	Name (LAST, First)	<b>MURADE, Masao</b>
<b>III-1-5</b>	Address:	<b>c/o SEIKO EPSON CORPORATION 3-5, Owa 3-Chome, Suwa-Shi, Nagano 392-8502 Japan</b>
<b>III-1-6</b>	State of nationality	<b>JP</b>
<b>III-1-7</b>	State of residence	<b>JP</b>

## PCT REQUEST

IV-1	<b>Agent or common representative; or address for correspondence</b> The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:	<b>agent</b>
IV-1-1	Name (LAST, First)	<b>SUZUKI, Kisaburo</b>
IV-1-2	Address:	<b>c/o Intellectual Property Department SEIKO EPSON CORPORATION 3-5, Owa 3-Chome Suwa-Shi, Nagano 392-8502 Japan</b>
IV-1-3	Telephone No.	<b>0266-52-3139</b>
IV-1-4	Facsimile No.	<b>0266-58-3243</b>
IV-2	<b>Additional agent(s)</b>	<b>additional agent(s) with same address as first named agent</b>
IV-2-1	Name(s)	<b>KAMIYANAGI, Masataka; SUZAWA, Osamu</b>
V	<b>Designation of States</b>	
V-1	Regional Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	--
V-2	National Patent (other kinds of protection or treatment, if any, are specified between parentheses after the designation(s) concerned)	<b>CN JP KR US</b>
V-5	<b>Precautionary Designation Statement</b> In addition to the designations made under items V-1, V-2 and V-3, the applicant also makes under Rule 4.9(b) all designations which would be permitted under the PCT except any designation(s) of the State(s) indicated under item V-6 below. The applicant declares that those additional designations are subject to confirmation and that any designation which is not confirmed before the expiration of 15 months from the priority date is to be regarded as withdrawn by the applicant at the expiration of that time limit.	
V-6	<b>Exclusion(s) from precautionary designations</b>	<b>NONE</b>
VI-1	<b>Priority claim of earlier national application</b>	
VI-1-1	Filing date	<b>28 December 1998 (28.12.1998)</b>
VI-1-2	Number	<b>10-373588(P)</b>
VI-1-3	Country	<b>JP</b>
VI-2	<b>Priority document request</b> The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) identified above as item(s):	<b>VI-1</b>

## PCT REQUEST

F004692WO00

VII-1	International Searching Authority Chosen	Japanese Patent Office (JPO) (ISA/JP)	
VIII	Check list	number of sheets	electronic file(s) attached
VIII-1	Request	3	-
VIII-2	Description	41	-
VIII-3	Claims	6	-
VIII-4	Abstract	1	f004692wo00
VIII-5	Drawings	19	-
VIII-7	TOTAL	70	
	Accompanying items	paper document(s) attached	electronic file(s) attached
VIII-8	Fee calculation sheet	✓	-
VIII-9	Separate signed power of attorney	✓	-
VIII-16	PCT-EASY diskette	-	diskette
VIII-18	Figure of the drawings which should accompany the abstract	2	
VIII-19	Language of filing of the international application	Japanese	
IX-1	Signature of applicant or agent		
IX-1-1	Name (LAST, First)	SUZUKI, Kisaburo	
IX-2	Signature of applicant or agent		
IX-2-1	Name (LAST, First)	KAMIYANAGI, Masataka	
IX-3	Signature of applicant or agent		
IX-3-1	Name (LAST, First)	SUZAWA, Osamu	

## FOR RECEIVING OFFICE USE ONLY

10-1	Date of actual receipt of the purported international application	
10-2	Drawings:	
10-2-1	Received	
10-2-2	Not received	
10-3	Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application	
10-4	Date of timely receipt of the required corrections under PCT Article 11(2)	
10-5	International Searching Authority	ISA/JP
10-6	Transmittal of search copy delayed until search fee is paid	

## FOR INTERNATIONAL BUREAU USE ONLY

11-1	Date of receipt of the record copy by the International Bureau	
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**PATENT COOPERATION TREATY**  
**P C T**

**INTERNATIONAL SEARCH REPORT**

(PCT Article 18 and Rules 43 an 44)

Applicant's or agent's file reference <b>F004692WO00</b>	<b>FOR FURTHER ACTION</b>	see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.
International application No. <b>PCT/JP99/07382</b>	International filing date ( <i>day/month/year</i> ) <b>27. 12. 99</b>	(Earliest) Priority date ( <i>day/month/year</i> ) <b>28. 12. 98</b>
Applicant  <b>Seiko Epson Corporation</b>		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 2 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. The basis of International Search Report
  - a. The international search was carried out on the basis of the language in which this international application was filed exclusive of the cases indicated below.

☐ The international search was carried out on the basis of the translation of the international application submitted to this International Search Authority.
  - b. The international application contains disclosure of a nucleotide and/or amino acid sequence listing and the international search was carried out on the basis of the sequence listing.

☐ The sequence listing in writing contained in this international application.  
☐ The sequence listing in flexible disk submitted with this international application.  
☐ The sequence listing in writing submitted to this International Search Authority after the application.  
☐ The sequence listing in flexible disk submitted to this International Search Authority after the application.  
☐ Written statement was submitted, that the sequence listing in writing submitted after the application did not contain matters which exceed the scope of the disclosure of the international application on application.  
☐ Written statement was submitted, that the sequence mentioned in the sequence listing in writing and the sequence recorded in the sequence listing in flexible disk are identical.
2. ☐ Certain claims were found unsearchable (see Box I).
3. ☐ Unity of invention is lacking (see Box II).
4. With regard to the **title**, ☒ the text is approved as submitted by the applicant.  

☐ the text has been established by this Authority to read as follows:  
  
\_\_\_\_\_
5. With regard to the **abstract**, ☒ the text is approved as submitted by the applicant.  

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.
6. The figure of the **drawings** to be published with the abstract is:  

Figure No. 2

☒ as suggested by the applicant.  
☐ because the applicant failed to suggest a figure.  
☐ because this figure better characterizes the invention.

☐ None of the figures.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP99/07382

A. CLASSIFICATION OF SUBJECT MATTER  
Int. C17 G02F1/1368

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
Int. C17 G02F1/136

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
Jitsuyo Shinan Koho 1922-1996  
Kokai Jitsuyo Shinan Koho 1971-2000

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP, 5-257164, A (Sharp Corporation), 08 October, 1993 (08.10.93) (Family: none)	1-30
A	US, 5784132, A (Sony Corporation), 21 July, 1998 (21.07.98) & JP, 8-122768, A & EP, 708355, A2	1-30

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

\* Special categories of cited documents:  
"A" document defining the general state of the art which is not considered to be of particular relevance  
"E" earlier document but published on or after the international filing date  
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  
"O" document referring to an oral disclosure, use, exhibition or other means  
"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art  
"&" document member of the same patent family

Date of the actual completion of the international search  
07 March, 2000 (07.03.00)

Date of mailing of the international search report  
21 March, 2000 (21.03.00)

Name and mailing address of the ISA/  
Japanese Patent Office

Authorized officer

Facsimile No.

Telephone No.